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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,664	05/11/2001	Kenji Dosaka	107348-00102	5105

4372 7590 05/19/2003

ARENT FOX KINTNER PLOTKIN & KAHN  
1050 CONNECTICUT AVENUE, N.W.  
SUITE 400  
WASHINGTON, DC 20036

EXAMINER

MAYEKAR, KISHOR

ART UNIT	PAPER NUMBER
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1753

DATE MAILED: 05/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



## Office Action Summary

Application No.

09/852,664

Applicant(s)

K. DOSAKA et al.

Examiner

Kishor Mayekar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on Mar 10, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above, claim(s) 2, 3/2, 4/2 and 5-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3/1 and 4/1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Election/Restriction*

1. Applicant's election without traverse of invention of Group I, claims 1, 3/1 and 4/1 in Paper No. 7 is acknowledged.

### *Claim Rejections - 35 USC § 112*

2. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 4 claims that the amount  $a$  is offset from the midpoint of the distance between the pair of electrodes and satisfies the recited formula. However, when  $a = 0$  the amount  $a$  is no longer an offset itself. It is not clear why  $a$  is called an offset.

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3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 4<sup>1</sup> is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4<sup>1</sup>, the phrase "the amount  $\underline{a}$ " is lacking antecedent basis and is confusing in combination with the phrase "that the center ... width direction". The terms "a" and "d" are not defined. The phrase " $\underline{a}$  ... is offset ... (d/2)" is confusing as to the offset of  $\underline{a}$  when  $\underline{a}$  is equal to zero.

*Claim Rejections - 35 USC § 102 and § 103*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3/1 and 4/1 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over CONRAD (5,211,919).

CONRAD's invention is directed to a flat plate corona cell for generating ozone. CONRAD discloses in Fig. 3 and in col. 5, lines 54-65 and col.7, lines 1-8 that the cell comprises all the structure elements as claimed. The difference between CONRAD and the above claims is the method of operating the cell. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified CONRAD's teachings because it has been held that the manner in which the an apparatus operates is not germane to the issue of

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patentability of the apparatus itself, *Ex parte Wikdahl* 10 USPQ 2d 1546, *Ex parte McCullough*.

8. Claims 1, 3/1 and 4/1 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over KAMIYA et al. (5,549,874). KAMIYA's invention is directed to a discharge reactor. KAMIYA discloses in Fig. 5 and in col. 1, lines 62-67, lines 1-8 that the cell comprises all the structure elements as claimed. The difference between KAMIYA and the above claims is the method of operating the cell. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified KAMIYA's teachings because it has been held that the manner in which the an apparatus operates is not germane to the issue of patentability of the apparatus itself, *Ex parte Wikdahl* 10 USPQ 2d 1546, *Ex parte McCullough*.

9. Claims 1, 3/1 and 4/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over DUARTE (5,554,344) in view of KAMIYA '874. DUARTE's invention is directed

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to a gas ionization device. DUARTE discloses in Fig. 1 and claim 1 that the device comprises a pair electrodes facing each other and a dielectric material positioned between the pair of electrodes and an electric source to power the electrodes. The differences between DUARTE and the above claims are the type of the power source and the method of operating the device. As to the former, KAMIYA shows an AC source to power the electrodes in a discharge reactor (Fig.7). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified DUARTE's teachings as suggested by KAMIYA because the selection of any equivalent electric source to power the electrodes would be within the level of ordinary skill in the art.

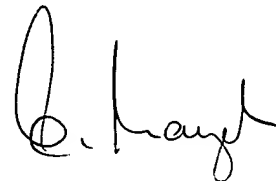
As to the latter, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified DUARTE's teachings as modified by KAMIYA because it has been held that the manner in which the apparatus operates is not germane to the issue of patentability of the apparatus itself, *Ex parte Wikdahl*/10 USPQ 2d 1546, *Ex parte McCullough*.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (703) 308-0477. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen, can be reached on (703) 308-3322. The fax phone number for this Group is (703) 872-9310 (non-after finals) or 872-9311 (after final).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.



Kishor Mayekar  
Primary Examiner  
Group 1700

KM  
May 15, 2003